

NORTHERN ARCHITECTURAL ASSOCIATION.

INSTITUTED 1858.

(ALLIED WITH THE R.I.B.A.)

OPENING ADDRESS,

DELIVERED BY THE PRESIDENT,

ARCHIBALD M. DUNN, Esq.,

AT A

GENERAL MEETING OF THE MEMBERS, HELD AT THE ART GALLERY,

NEWCASTLE-UPON-TYNE, 18TH NOVEMBER, 1896.

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DUNN.—On the 17th Jan., at The Wood House,
Bournemouth, Archibald Matthias Dunn, J.P.,
of Castle Hill, Wylam-on-Tyne, in his 85th
year.

AN IDEAL ARCHITECT.

I PROPOSE, in my address this evening, to draw the picture of an "Ideal Architect;" to set up as it were a model which we all,—whether we are mature and developed Architects like many around me, or whether we are still in the embryo state like many of my young friends,—are striving to emulate.

In the first place, let me congratulate you, as I often congratulate myself, that we belong to a profession that, I do not hesitate to say, is amongst the noblest, as it is certainly the most artistic and scientific of all professions, and the most enjoyable. The pursuit of Architecture is not a labour, it is a pleasure.

It is the most artistic, because it embraces all the arts, which are really subservient to it, and which are called in to embellish and adorn it, and are part and parcel of it; it is the most scientific, as, in like manner, a knowledge of all sciences is necessary to the proper carrying out of a great architectural work, and they are, in fact, essential to it.

Let us consider what an Architect must be and know, in order to approach the ideal standard which we propose to set up.

He must, in every sense of the word, be an *Artist*. He must be a *Constructor*. He must be an *Engineer*. You must not smile at this last assertion; it is absolutely correct, and I think we shall see, by considering what has been accomplished by Architects in this direction, that it is so.

Let us go back to remote times, times so remote that our oldest monuments seem but as things of to-day; I allude to the stupendous works of the Egyptian Architects, as we now see them in the magnificent Nile Temples. The stone generally used in these Temples was a species of Granite called "Syianite," of excessive hardness, and it was used in blocks of such huge dimensions that it almost passes belief how they could have been handled at all, or lifted into their places high above the ground. For instance, many of the stone slabs forming the roof of the great Temple of Karnak weigh upwards of 50 tons, other stones are calculated to weigh from 100 to 300 tons, all set without mortar, and jointed with such accuracy that the blade of a penknife can hardly be inserted between them.

Lord ARMSTRONG (then Sir WILLIAM ARMSTRONG) than whom no higher authority lives on such a question, in a most interesting paper which he read before the Lit. and Phil. Society on the subject of the construction of these Temples, speaks thus of the huge masses of masonry which he saw there. He was speaking, in this instance, of the celebrated Memnonium at Thebes, and of the great Statue of Rameses the Great which is cut out of a single block of Syanite,

calculated to have weighed, before the artist commenced upon it, 1,300 tons. He says, "to have brought such a block of stone from a distance of 135 miles was a feat which would daunt the courage of a modern Engineer, although aided by the powers and appliances unknown to the ancient Egyptians." Sir WILLIAM, also describing the process by which these huge blocks of stone were quarried by means of wooden wedges which were inserted and afterwards swelled by water, says, "if any Engineer of the present day were to attempt to detach, by this means, a block of Syanite weighing 1,000 tons or more, I would bet long odds against his success." When we consider the enormous masses of these stones, the distance they were transported, the admirable accuracy with which they were built and finished (although it is almost certain the use of steel or iron was unknown to the Egyptians), I think we may surely assert that the Egyptian Architects accomplished engineering feats of no mean excellence.

But great as these are, they almost pale before similar feats which have been accomplished in the building of the "Great Temple of the Sun," at Baalbek. Here we see in the basement of the Temple, stones of such dimensions as to take their place amongst the wonders of the world. One stone placed in position, 20 feet above the ground, measures in length 69 feet, in width 10 feet 5 inches, and in depth, 13 feet. Another stone, lying in the quarry ready for removal, measures 69 feet in length, and is 14 feet square, the weight being calculated at 1,100 tons. The entablature of this same Temple, with all its architectural enrichments worked on it, is got out in solid blocks 14 feet deep, and when lifted on to the columns which support it, reaches a total height of 90 feet from the ground.

But let us come to more modern times and nearer home, and see if these Architects were also Engineers. The late ROBERT STEPHENSON, who as an authority we may mention on the same lines with Sir WILLIAM ARMSTRONG, told me that he had measured the Lantern of our beautiful Tower of St. Nicholas, and found the weight to be 70 tons, adding, "I have always regarded the construction of it as one of the greatest engineering feats."

For myself, I always look on the construction of that beautiful mediæval form, the Gothic Spire, as no mean engineering effort, and, I think the Architect who first reared the delicate shell work of stone, varying from 11 inches to 6 inches in thickness, which forms the spire itself, and was satisfied to carry the same to the height of 300 or 400 feet, and felt that it was safe, must indeed have been a daring as well as a scientific man, and, I confess, when I came to build spires myself, although I had gone carefully into the construction, and had the old examples before me, I could hardly realise that such slight and delicate construction was all that was necessary to be self-sustaining and, at the same time, sufficient to resist the pressure of the winds at such great altitudes.

Come to still more modern times, and let us see whether the Architects of the present day are also capable of engineering feats.

During a recent visit to America I had an opportunity of seeing the leviathan buildings which have made Chicago so famous, and I had the advantage of going over, with the Architect, one of the largest in course of construction. I was told that the foundations of Chicago, possibly on account of its proximity to Lake Michigan, were notoriously bad, wet, and shifty, and presented great difficulties (which may fairly be described as engineering ones) to be overcome. Nevertheless, the American Architects, nothing daunted, have managed to erect the highest inhabited buildings in the world on this most unsound foundation; and I must say, although I looked about me with considerable interest, I did not see evidence of settlements having taken place, although the weight of these buildings must have been something enormous. Some of them are of 20 stories, rising to a height considerably greater than the spire of St. Mary's Cathedral in this town, which is 220 feet; and whilst I was there it was projected to erect a building of 34 stories, which would probably be 400 feet high.

In the short space of this paper, it is not possible to enter into any detailed description of how the difficulties of the foundations were overcome, but it will be sufficient to state that the buildings are carried on an ingenious foundation or platform of light ironwork and concrete. Each story is a self-supporting structure of ironwork, the stone facing being merely attached to it, the whole presenting an exhibition of engineering skill that reflects the highest credit on our brother Architects of America.

Many other examples may be cited where Architects have shown the highest engineering skill in connection with their buildings, and I venture to say our "Ideal Architect" has proved that he is also an Engineer.

As distinct from this, an Architect must also be a "Constructor."

He must have the most thorough and complete acquaintance with all building materials, and how to put them together. He must understand thoroughly the details of each trade that is required to make up a building. If, in addition to being able to tell a workman that he is doing his work wrongly, he can also *show* him how it ought to be done, then he is indeed an "Ideal Architect." There are Architects who can do this. A practical acquaintance with the Trades, more especially the Carpenter's, is invaluable. The Architect in whose office I was brought up, thought a great deal of this, and an occasional turn at the bench was part of the Curriculum of his Pupils.

Without such knowledge we cannot hope to be "Ideal." The men who designed the great wooden Roofs of Westminster Hall and of the fine old Parish Churches, the designers of the beautiful fan vaulting with its pendentives of Henry VII. Chapel, and King's College, Cambridge, of the great stone vaulted Churches of Spain and Southern France, with their clear spans of some 70 feet, and

the men who put up such Domes as St. Peter's in Rome, and St. Paul's in London, were all great constructors.

The mere contemplation of these inspires to great things, and encourages us in going through the drudgery of acquiring practical knowledge which makes such things possible.

Lastly, perhaps it would have been more correct to have said, firstly, the Ideal Architect must be an artist—must be full of art.

By this I do not mean to say that he should be able to paint a picture, or model a statue, but he must have a thorough knowledge, and he must be a judge of all the arts that go to make up his building, clothing and adorning it in robes of beauty, from the hammered art of the blacksmith to the gorgeous mosaics that fill the pendentives of his domes, and give colour and life to his walls. I know no more important function of the Architect than the determining of the size and scale of the figures that fill the stained windows or adorn the walls in frescoes or statuary. It is essentially the work of the Architect and should always be left in his hands. The artist who paints his pictures in glass or otherwise, the sculptor who has to produce the statuary, are not always the best judges of the proportion these figures should bear towards the building. We are all human, and there is a natural tendency to give undue prominence to our own—sometimes with lamentable results. I know no more striking illustration of this than can be seen in the Great Basilica of St. Peter's, at Rome. The elder PUGIN, who was not only a great Architect, but also a great art critic, always spoke of it as the "Great Failure," perhaps for this reason. Immediately on entering the Church you take Holy Water out of a stoup held by an Angelic Cherub in marble, if I remember correctly, some 9 or 10 feet high. The visitor is naturally overwhelmed at once, not by the grand dimensions of the Church, but of the Cherub, which is out of all proportion with everything; nor is this first impression of disappointment dissipated until, leaving as it were the Church behind, he stands under Michael Angelo's matchless Dome, lifting its great height into heaven itself, glowing in its Mosaic enrichments of admirably proportioned figures. If the Cherub had been where these Mosaics were, it would have been about the right size. There have always been, and there are amongst us now, eminent architects who can draw the cartoons for stained glass and decorations, the details of carvings, hammered iron work, and the artistic furniture of their own buildings. No doubt this artistic gift is not given to all in equal degree, but to all is given, more or less, a certain artistic perception—a knowledge, as it were, of good and evil in art; and it is this gift (which it is natural to suppose is possessed in a marked degree by those who dedicate themselves to Architecture) which every Architect is bound to develop and encourage in every possible way, and in no better way than by the reverend study of the works of the great men who have gone before us. Nay, for the matter of that, by the study of the works of the men of the present day (some of them most beautiful and worthy of study)

which spring up around us in all our great cities, and from which lessons are to be learnt as readily as from the works of the middle ages.

Therefore, every Architect should be able at least to sketch and control the decorations and adornments of his own buildings.

The success of every building depends more or less on the way these are carried out. Where they have been carefully supervised, there is that indefinable sense of completeness which gives such satisfaction. More especially is this so in regard to carving. It is not wise to turn a carver, however able, loose into a building with a general direction that it is to be done in such and such a style. All important carving should be modelled in clay under the direction of the Architect, who should be able, if need be, to take up the tool or use his hands to shape it to his wish. Modelling in clay is both an easy and delightful amusement.

There is still one other little thing an Architect must be. He must be an eminently just man. Between client and contractor he occupies a very delicate position, and he is required to hold the scales of justice between the two with the greatest nicety. He may have a client who expects too much, or he may have a contractor who is disposed to give too little. This involves intricate and delicate questions. It is a subject that has been ably dealt with before the Institute of British Architects and I do not propose, in this paper, to say more than that, when such questions arise, which I am pleased to think are not very common, if we are guided by the conscientious conviction of what we think just, irrespective of all other consideration, we shall be right, and may rest satisfied.

One word more before I finish. Why are Architects not more thoroughly identified with their works than they are? In other words, why do Architects not sign their work as do painters, sculptors and engineers? Is not the work of an Architect a picture in stone, marble, or terra-cotta, as the case may be, enduring for long ages? I am not one of those who think it is ill taste for an Architect to allow his name to appear on his building. On the contrary, I am of opinion that both the name of the designer and the date should appear on all the more important buildings. From an historical point of view alone it would be most valuable. The history of many of the finest monumental works of bygone ages would have been better known had this custom obtained.

We happen to know who were the Architects of the Parthenon, and the sculptors engaged on that most perfect work; but who can say the name of the Architects of the equally wonderful work of the Baalbek and Nile Temples, of which we have spoken? Who conceived that splendid pile of towers and gables crowning the hill at Durham? for there is little doubt, although the Cathedral was built at different periods, the general idea was the conception of one mind. For the matter of that, who designed our own beautiful St. Nicholas? We know who was the generous citizen who paid for it; but who

was the Architect who carried out this engineering feat, and, at the same time, clothed it in such graceful form?

During my travels in different parts of the world, I have had opportunities of seeing wonderful examples of Architectural art, but have observed, I confess with feelings of sadness, how exceedingly rare it is to find any record of the men who produced them—their very names are unknown. The princes in whose reigns they may have been erected are all duly recorded, and occasionally the names of the generous donors are handed down to posterity; but of the great minds that have created these wonderful works that have been for ages gone by and will, for ages still to come, be the delight and astonishment of the world, there is no record.

Let us hope that the poor Architect worked for the love of his art, and not for fame; that he may have reaped, to some extent, at all events, a portion of his reward in seeing his dreams realised in imperishable materials. Perhaps in thinking it should be otherwise we expect too much. I do not know, but I think the question as to whether an Architect should sign his work is worthy of consideration.

Speaking to so large and representative an assemblage of the Architects of the Northern Counties, I think I cannot more fittingly terminate this address than by making a public and earnest appeal to those who may be the owners, or who may be the natural conservators of the architectural antiquities of Newcastle—an appeal for the preservation of the “Arbour Tower” of which we have lately heard so much.

In speaking as your President, I know I am expressing the great desire of you all, that something may be done to save this relic (of which so few remain to us) of the military history of this great Border town. The walls of the town, of which this tower forms a part, are, I believe, in the hands of the Corporation, but this particular tower is the property of the Armourers’ Company. It is now proposed to destroy it for the purpose of finding a site for a bakery. Surely the Corporation and the Armourers between them might come to some arrangement by which a site for a Bakery might be found elsewhere. If it is a question of money, which it is difficult to believe, the amount cannot be large, and I venture to think, there is not a ratepayer in Newcastle who would raise his voice against the Corporation becoming the owners of it, to hold it in jealous trust for the sake of the history of the “Canny Town.”

Let us hope, therefore, that something may be done to save this small but interesting monument, interesting in a special way to you, but no less so, in point of association and local tradition, to all connected with Newcastle, which, had we not improved quite so much, would undoubtedly have been one of the finest examples in the Kingdom of a walled City of the Middle Ages.